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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,796	09/06/2006	Lysander Chrisstoffels	295115US0PCT	4646
22850	7590	09/21/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER PEZZUTO, HELEN LEE	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			09/21/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/591,796	Applicant(s) CHRISSTOFFELS ET AL.	
	Examiner Helen L. Pezzuto	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 10-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-9 in the reply filed on 8/26/09 is acknowledged. The traversal is on the ground(s) that no adequate reasons have been provided to support a conclusion of patentable distinctiveness between the identified groups, and further that it has not been shown that a burden exists in searching the claims of the four groups. This is not found persuasive because the reasons for restriction was set forth in previous communication. Applicant has not specifically traversed the reasons provided. Furthermore, the four groups of inventions are classified in different area of technology, and thus, would impose a burden on the office to search and examine the four groups together.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 10-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 8/26/09.

Art Unit: 1796

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosoda et al. (US-600) or JP 2003-096112.

US 4,380,600 to Hosoda et al. discloses an aqueous dispersion of water soluble polymer prepared by dispersion polymerization of 10-100 parts by weight of at least one ethylenically unsaturated monomer in the presence of 3 to 150 parts by weight of a water soluble polymer, initiator, and an inorganic salt (see abstract; col. 3, lines 18-32; col. 7, lines 10-31). Suitable ethylenically unsaturated monomer include vinylpyrrolidone among others (col. 5, line 22), and suitable water soluble polymer include those containing various functional groups, which fall within the scope of the instant protective colloid (col. 5, lines 38-62). Prior art disclose a polymerization temperature of 10-100°C, wherein the polymerization may be conducted batch

Art Unit: 1796

wise or continuously (col. 6, line 65 to col. 7, line 4).

The preparation of a N-vinylpyrrolidone/acrylamide copolymer dispersion was exemplified (col. 15, Example 34).

JP 2003-096112 discloses a water-soluble dispersion derived from dispersion polymerization of 5-100 mol% of a monomer set forth in formula (1), and 0-95 mol% of a nonionic monomer, in the presence of inorganic particles, initiator, a polymeric dispersant in aqueous salt solution (i.e. ammonium sulfate) (see abstract, [0009], [0014]).

Suitable nonionic monomer include N-vinylpyrrolidone ([0026]). Suitable polymeric dispersant include ionic polymers derived from anionic and cationic monomers, thus, encompassing the instant protective colloid ([0018]).

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1396508 A1 in view of WO 98/14490.

EP-508 discloses the preparation of an aqueous cationic polymer dispersion containing 1-99 wt% of a cationic monomer, 1-99 wt% of a water-soluble monomer polymerized in the presence of 1-100% of a salt, and 0.1-20 % of an amphoteric dispersant (see abstract). Suitable water-soluble monomer include N-vinyl lactam (i.e. N-vinylpyrrolidone) (page 4, [0027]; page 11-12, Examples 3-7), and suitable polymeric dispersant includes anionic and

Art Unit: 1796

cationic monomers, defined within the scope of the instant protective colloid (page 6, [0054]; page 7, [0060]). Prior art teaches any inorganic or organic salt, inclusive of those taught in WO 98/14405 which is incorporated by reference (page 6, [0045]-[0046] (also see WO-405, page 2, line 25). WO 98/14490 further discloses the suitability of citrates, acetates as organic salt in the preparation of aqueous dispersion (see WO-490, page 21, lines 34-35). Thus, it would have been obvious to use an organic carboxylic salts as taught, motivated by the reasonable expectation of success. Moreover, the inclusion of chain transfer agent used to adjust the molecular weight of the polymer product is expressly disclosed (page 7, [0063]).

Prior art references discussed above teaches the instant process with the exception of the recited K value. Being silent, prior art is generic to any K values or molecular weight. The examiner takes the position that it would have been obvious to one having ordinary skill in the art to prepare a polyvinyl lactam dispersion having any molecular weight (i.e. K value) via use of chain transferring agents as taught in EP-508 and via the use of viscosity modifier such as salt and dispersant, absent showing of unexpected result derived from the recited

process in obtaining a polyvinyl lactam dispersion having the claimed. K value.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/591,796

Page 7

Art Unit: 1796

/Helen L. Pezzuto/

Primary Examiner

Art Unit 1796

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